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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,074	04/30/2001	Edward O. Clapper	INTL-0567-US (P11338)	4543

7590

02/20/2004

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EXAMINER

DHARIA, PRABODH M

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 02/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,074

Applicant(s)

CLAPPER, EDWARD O.

Examiner

Prabodh M Dharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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1. **Status:** Receipt is acknowledged of papers submitted on 02-09-2004 under appeal brief, have been placed of record in the file. Claims 1-30 are pending in this action.

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6,10,11,13,14,17-22,26,28-30, are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman et al. (6,100,875) in view of Franz et al. (6,107,996) and Nakajima et al. (6,346,935 B1).

Regarding Claim 1, Goodman et al. teaches an apparatus (Col. 2, Lines 9,10) comprising: an interface (Col. 5, Lines 18,19, Col. 5, Lines 26-34); and a controller communicatively coupled to the interface (Col. 5, Lines 26-34, Col. 6, Lines 13-16, Lines 25-29), the controller to detect a non specific key activation (Col. 5, Lines 35-38) and to adjust a cursor of a pointing device in response to detecting the key activation (Col. 2, Lines 9-11, Col. 3, lines 45-56).

However, Goodman et al. fails to teach the adjustment of said cursor to minimize inadvertent interruption of user input.

However, Franz et al. teaches the adjustment of said cursor to minimize inadvertent interruption of user input (Col. 13, Line 62 to Col. 14, Line 4, Col. 18, Line 57 to Col. 19, Line 9, Col. 19, Line 52 to Col. 20, Line 5).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Franz et al. in Goodman et al. teaching for having a user friendly integrated keyboard with pointing device and reduce the restriction in operation as well as duplication of the hardware.

Goodman et al. teaches an apparatus (Col. 2, Lines 9,10) comprising: an interface (Col. 5, Lines 18,19, Col. 5, Lines 26-34); and a controller communicatively coupled to the interface (Col. 5, Lines 26-34, Col. 6, Lines 13-16, Lines 25-29), the controller to detect a non specific key activation (Col. 5, Lines 35-38) and to adjust a cursor of a pointing device in response to detecting the key activation (Col. 2, Lines 9-11, Col. 3, lines 45-56).

However, Goodman et al. fails to teach a keyboard, the keyboard including a pointing device separate from the keys of the keyboard and to adjust a cursor of the pointing device in response to detecting the key activation, said adjustment of said cursor to minimize inadvertent interruption of user input.

However, Nakajima et al. teaches a keyboard, the keyboard including a pointing device separate from the keys of the keyboard and to adjust a cursor of the pointing device in response to detecting the key activation, said adjustment of said cursor to minimize inadvertent interruption of user input (Col. 13, Lines 37-45, Col. 21, Lines 47-57).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Nakajima et al. in Goodman et al. teaching for having a user friendly integrated keyboard with pointing device and reduce the restriction in operation as well as duplication of the hardware.

Regarding Claim 2, Goodman et al. teaches the controller moves the cursor to a pre-selected area on a display device in response to detecting the key activation (Col. 2, Lines 9-11, Col. 3, lines 45-56).

Regarding Claim 3, Goodman et al. teaches the keyboard comprises the pointing device (Col. 6, Lines 59-62).

However, Goodman et al. fails to teach the controller prevents movement of the cursor in response to detecting the key activation

However, Franz et al. teaches the controller prevents movement of the cursor in response to detecting the key activation (Col. 13, Line 62 to Col. 14, Line 4, Col. 30, Lines 3-14).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Franz et al. in Goodman et al. teaching for having a user friendly integrated keyboard with pointing device and reduce the restriction in operation as well as duplication of the hardware.

Regarding Claim 4, Franz et al. teaches the controller reduces at least one of a movement and sensitivity of the cursor in response to detecting the key activation (Col. 13, Line 62 to Col.

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14, Line 4).

Regarding Claim 5, Goodman et al. teaches the controller adjusts the cursor in response to activation of a selected key (Col. 4, Lines 58-64).

Regarding Claim 6, Goodman et al. teaches the controller adjusts the cursor until key activation is no longer detected (Col. 6, Lines 52-55).

Regarding Claim 9, Goodman et al. teaches the controller detects a selection of a key of a keyboard (Col.6, Lines 52-55, Col. 5, Lines 35-38).

Regarding Claim 10, Goodman et al. teaches a method, comprising: detecting a selection of at least one key of a keyboard; and adjusting a cursor of a pointing device in response to detecting the selection of the at least one non specific key (Col.6, Lines 52-55, Col. 5, Lines 35-38, Col. 3, Lines 45-52).

Nakajima et al. teaches a keyboard, the keyboard including a pointing device separate from the keys of the keyboard and to adjust a cursor of the pointing device in response to detecting the key activation, said adjustment of said cursor to minimize inadvertent interruption of user input (Col. 13, Line 62 to Col. 14, Line 4, Col. 30, Lines 3-14).

Franz et al. teaches the adjustment of said cursor to minimize inadvertent interruption of user input (Col. 13, Line 62 to Col. 14, Line 4, Col. 18, Line 57 to Col. 19, Line 9, Col. 19, Line 52 to Col. 20, Line 5).

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Regarding Claim 11, Goodman et al. teaches the adjusting the cursor comprises moving the cursor to a pre-selected area of a graphical user interface (Col.6, Lines 52-55, Col. 5, Lines 35-38, Col. 3, Lines 45-52, Col. 3, Line 67 to Col. 4, Line 6).

Regarding Claim 13, Franz et al. teaches the adjusting the cursor comprises preventing the cursor from moving (Col. 13, Line 62 to Col. 14, Line 4).

Regarding Claim 14, Goodman et al. teaches the adjusting the cursor comprises adjusting the cursor based on a selection of a pre-selected key (Col. 4, Lines 58-64, Col. 3, Lines 45-51).

Regarding Claim 17, Goodman et al. teaches an article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to: detect a non specific key activation; and control a cursor of a pointing device in response to detecting the key activation (Col. 6, Lines 23-46, Col. 3, Lines 52).

Franz et al. teaches the control of said cursor to enable user input without accidental interference from said pointing device (Col. 13, Line 62 to Col. 14, Line 4, Col. 18, Line 57 to Col. 19, Line 9, Col. 19, Line 52 to Col. 20, Line 5).

Nakajima et al. teaches configure an option to control a cursor of a pointing device based on a selected preference of a user, the control of said cursor to enable user input without accidental interference from said pointing device (Col. 13, Line 62 to Col. 14, Line 4, Col. 30, Lines 3-14).

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Regarding Claim 18, Franz et al. teaches the instructions when executed enable the processor to lock the cursor of the pointing device at a selected position in response to detecting the key activation (Col. 13, Line 62 to Col. 14, Line 17).

Regarding Claim 19, Franz et al. teaches the instructions when executed enable the processor to move the cursor of the pointing device to a selected area on a display device in response to detecting the key activation (Col. 23, Lines 36-43, Lines 52-60).

Regarding Claim 21, Franz et al. teaches the instructions when executed enable the processor to adjust the sensitivity of the pointing device in response to detecting the key activation (Col. 10, Lines 7-24).

Regarding Claim 22, Franz et al. teaches the instructions when executed enable the processor to control the cursor of the pointing device based on the key activation of one or more pre-selected keys (Col. 22, Lines 4-34).

Regarding Claim 26, Goodman et al. teaches a system comprising: a pointing device; a keyboard having one or more keys (Col. 6, Lines 59-62); and teaches an apparatus (Col. 2, Lines 9,10) comprising: an interface (Col. 5, Lines 18,19, Col. 5, Lines 26-34); and a controller communicatively coupled to the interface (Col. 5, Lines 26-34, Col. 6, Lines 13-16, Lines 25-29), the controller to detect a key activation (Col. 5, Lines 35,36) and to adjust a cursor of a

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pointing device in response to detecting the non specific key activation (Col. 2, Lines 9-11, Col. 3, lines 45-56).

Franz et al. teaches the adjustment of said cursor to enable key activation without unwanted input from said pointing device (Col. 13, Line 62 to Col. 14, Line 4, Col. 18, Line 57 to Col. 19, Line 9, Col. 19, Line 52 to Col. 20, Line 5).

Nakajima et al. teaches a keyboard, the keyboard including a pointing device separate from the keys of the keyboard and the adjustment of said cursor to enable key activation without unwanted input from said pointing device (Col. 13, Line 62 to Col. 14, Line 4, Col. 30, Lines 3-14).

Regarding Claim 28, Franz et al. teaches the instructions when executed enable the processor to move the cursor of the pointing device to a selected area on a display device in response to detecting the key activation (Col. 23, Lines 36-43, Lines 52-60).

Regarding Claim 29, Franz et al. teaches the controller prevents the cursor from moving in response to detecting the activation of the one or more keys of the keyboard (Col. 22, Lines 29-34).

Regarding Claim 30, Franz et al. teaches the controller stops adjusting the cursor of the pointing device if no activation (searching to see if any key has been pressed) of the one or more keys is detected (Col. 23, Lines 6-10).

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5. Claims 7,8,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman et al. (6,100,875), Franz et al. (6,107,996) and Nakajima et al. (6,346,935 B1) as applied to claims 1-6,10,11,13,14,17-22,26,28-30, above, and further in view of Thorne, III et al. (5,805,165).

Regarding Claim 7, Goodman et al. teaches the keyboard comprises the pointing device (Col. 6, Lines 59-62).

However, Goodman et al. modified by Franz et al. and Nakajima et al. fails to teach the controller hides the cursor from view in response to detecting the key activation.

However, Thorne, III et al. teaches the controller hides the cursor from view in response to detecting the key activation (Col. 13, Lines 8-12).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Thorne, III et al. in Goodman et al. modified by Franz et al. and Nakajima et al. teaching for improvements in a cursor control movement and better cursor positioning control in a display.

Regarding Claim 8, Thorne, III et al. teaches the controller adjusts the cursor of one of a trackball device, touch pad device, and mouse device (Col. 9, Lines 13-20, Col. 9, Lines 20-27).

Regarding Claim 27, Goodman et al. modified by Franz et al. teaches the keyboard comprises the pointing device (Col. 6, Lines 59-62).

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However, Goodman et al. modified by Franz et al. and Nakajima et al. fail to teach the controller adjusts the cursor of one of a trackball device, touch pad device, and mouse device.

However, Thorne, III et al. teaches the controller adjusts the cursor of one of a trackball device, touch pad device, and mouse device (Col. 9, Lines 13-20, Col. 9, Lines 20-27).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Thorne, III et al. in Goodman et al. modified by Franz et al. and Nakajima et al. teaching for improvements in a cursor control movement and better cursor positioning control in a display.

6. Claim 12, is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman et al. (6,100,875), Franz et al. (6,107,996) and Nakajima et al. (6,346,935 B1) as applied to claims 1-6,10,11,13,14,17-22,26,28-30, above, and further in view of Ito (5,852,431).

Regarding Claim 12, Goodman et al. teaches the keyboard comprises the pointing device (Col. 6, Lines 59-62).

However, Goodman et al. modified by Franz et al. and Nakajima et al. fails to teach the adjusting the cursor comprises re-sizing (re-shaping) the cursor in response to detecting the selection of the at least one key.

However, Ito et al. teaches the adjusting the cursor comprises re-sizing (re-shaping) the cursor in response to detecting the selection of the at least one key (Col. 10, Lines 37,38).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Ito in Goodman et al. modified by Franz et al. and Nakajima et al.

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teaching for improvements in a cursor control movement, as well as re-shaping (re-sizing) the cursor and better cursor positioning control in a display.

7. Claims 15,16,23-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (6,107,996) in view of Paratore (6,243,258 B1).

Regarding Claim 15, Franz et al. teaches an article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to: receive an option to control a cursor of a pointing device in response to detecting a non specific key activation; and store the option in a storage unit (Col. 13, Line 62 to Col. 14, Line 17, Col. 22, Lines 40-47); and the control of said cursor to enable user input without accidental interference from said pointing device (Col. 13, Line 62 to Col. 14, Line 4, Col. 18, Line 57 to Col. 19, Line 9, Col. 19, Line 52 to Col. 20, Line 5).

However, Franz et al. fails to teach the control of said cursor to enable user input without accidental interference from said pointing device

However, Paratore teaches the control of said cursor to enable user input without accidental interference from said pointing device (Col. 2, Lines 26-33, Col. 3, Lines 45-55, if it is in the Keyboard input mode it prevents interference from pointing device and if it is in pointing device input mode it prevents interference from keyboard, Col. 5, Lines 18-32).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Paratore in Franz et al. teaching for improvements in a cursor control movement and better cursor positioning control in a display.

Regarding Claim 16, Franz et al. teaches the instructions when executed enable the processor to receive the option comprising at least one of moving the cursor to a pre-selected area on a display device, freezing the position of the cursor, and adjusting the size of the cursor (Col. 13, Line 62 to Col. 14, Line 17).

Regarding Claim 23, Franz et al. teaches an apparatus comprising: an interface; and a controller communicatively coupled to the interface, the controller to adjust a cursor of a pointing device during text-entry mode (Col. 10, Lines 25-67, Col. 24, Lines 10-13, Lines 19-44); and the control of said cursor to enable user input without accidental interference from said pointing device (Col. 13, Line 62 to Col. 14, Line 4, Col. 18, Line 57 to Col. 19, Line 9, Col. 19, Line 52 to Col. 20, Line 5).

However, Franz et al. fails to teach the control of said cursor to enable user input without accidental interference from said pointing device

However, Paratore teaches a keyboard, the keyboard including a pointing device separate from the keys of the keyboard (Col. 4, Lines 45-63) and the control of said cursor to enable user input without accidental interference from said pointing device (Col. 2, Lines 26-33, Col. 3, Lines 45-55, if it is in the Keyboard input mode it prevents interference from pointing device and if it is in pointing device input mode it prevents interference from keyboard, Col. 5, Lines 18-32).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate teaching of Paratore in Franz et al. teaching for improvements in a cursor control movement and better cursor positioning control in a display.

Regarding Claim 24, Franz et al. teaches the controller disables the movement of the cursor during the text-entry mode (Col. 16, Line 66 to Col. 17, Line 5).

Regarding Claim 25, Franz et al. teaches the controller adjust the cursor based on a location of a selected key during the text-entry mode relative to the location of the pointing device (Col. 24, Lines 10-13, Col. 16, Line 66 to Col. 17, Line 5).

Response to Arguments

8. Applicant's arguments filed 02-09-2004 fully considered but they are not persuasive.

Applicant argues the cited references does not teach prevention of inadvertent activation pointing device interrupting user's work.

Examiner disagrees as cited reference of Nakajima et al. teaches prevention of inadvertent activation pointing device interrupting user's work (Col. 21, lines 47-58), and Paratore teaches prevention of inadvertent activation pointing device interrupting user's work (Col. 3, Lines 46-56, Col. 4, Lines 12-23).

9. Applicant's arguments with respect to claims 1,10,15,17,23,26 have been considered but are moot in view of the new ground(s) of rejection.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references either anticipate or render the claims obvious. In order to not to be repetitive and exhaustive, the examiner did draft additional rejection based on those references.

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Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Levy (5,973,621) Compact Keyed input device.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 703-605-1231. The examiner can normally be reached on M-F 8AM to 5PM.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9341 for regular communications and 703-872-9341 for After Final communications.

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Any response to this action should be mailed to:

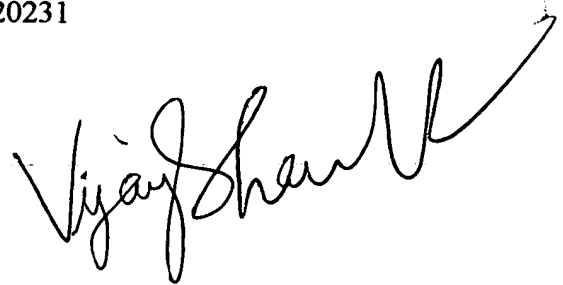
Commissioner of Patents and Trademarks

Washington, D.C. 20231

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February 17, 2004

A handwritten signature in black ink, appearing to read 'Vijay Shankar', with a long, sweeping horizontal stroke extending to the right.

**VIJAY SHANKAR
PRIMARY EXAMINER**